MOSES Contract Number 68-W-99-002
Task Order Number: 003

STATEMENT OF WORK

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STATEMENT OF WORK

1. **Title:** RCRIS, BRS and RCRAInfo Information Management Support

2. **Estimated Period of Performance:** From October 01, 2000 through September 30, 2001.

3. **Key EPA Personnel**

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4. **Background Information:**

a. Legal Authority: Resource Conservation and Recovery Act of 1976 and the Hazardous Waste and Solid Waste Amendments of 1980 and 1984.

b. RCRA regulations published in Federal Register on February 26 and May 19, 1980 and subsequently.

c. List of applicable background documents: None

d. Background Narrative:

The Resource Conservation and Recovery Information System (RCRIS) supports the national RCRA program to protect public health and the environment by requiring proper management of hazardous waste. Under the Resource Conservation and Recovery Act of 1976 and its amendments of 1980 and 1984 called the Hazardous Waste and Solid Waste Amendments (HSWA), the Environmental Protection Agency developed standards and procedures that must be followed by anyone who generates, transports, treats, stores, and/or disposes of hazardous waste. The initial RCRA regulations were published in the Federal Register on February 26 and May 19, 1980.

The Office of Solid Waste (OSW) has responsibility for tracking the status of RCRA permits and events associated with closure/post-closure and corrective action activities. The Office of Enforcement and Compliance Assurance (OECA) has responsibility for compliance monitoring, enforcement, inspection, and financial data in support of the RCRA mandates. The Resource Conservation and Recovery Information System (RCRIS) supports the national RCRA program to protect public health and the environment. RCRIS accommodates the needs of both the States and the EPA by allowing for the collection, management and maintenance of hazardous waste information submitted to both sectors (State and Federal). The first sector is known as the "implementer" domain which allows for the tracking and management of data on a day-to-day basis. It is at this level that a State or Region may collect and maintain information specific to their own hazardous

waste management program needs. The second level known as the "oversight" domain allows for the tracking of data used for oversight purposes in the Regions and Headquarters. The RCRIS National Oversight database is the official data source for EPA Headquarters reporting of RCRA activities.

As part of the EPA's regulatory activity, the Agency is required to collect information on a biennial basis from generators of hazardous waste and treatment, storage and disposal facilities as a means of reporting to Congress and the public the location, quantities, and disposition of hazardous wastes and to assess the effectiveness of existing regulations.

Although there are State-specific regulations governing sites in the generation, treatment, storage and disposal of hazardous waste, sites are regulated by the EPA as well. In order for the EPA to develop the report mandated by Congress, site-specific information on the generation, treatment, storage and disposal of hazardous waste must be obtained. Analysis of this information will also help the EPA measure nationwide progress in its mission to protect human health and the environment. This information must also be readily available for use by the Regions to support their activities in enforcement, permitting and program management. The Biennial Reporting System (BRS) is the current mechanism utilized by the EPA's Office of Solid Waste to collect and report biennial data on hazardous waste generation and management.

EPA and the States are working in partnership on a strategic multi-year initiative to re-define and support the information needs of the national RCRA program. This joint effort is described as the Waste Information Needs (WIN) Initiative. As part of the WIN initiative, OSW's current national information systems (the Resource Conservation and Recovery Information System - RCRIS; and the Biennial Report System - BRS) are being archived and their data is being migrated to the Internet-based technology architecture identified for WIN. The new national system is called RCRAInfo and it will be implemented in the fourth quarter of 2000. RCRAInfo will provide web-based data entry and

reporting software that is designed to be accessed across the Internet using commonly available Web browsers. Application users are responsible for obtaining a PC, Internet access and a current Web browser. All other software and hardware are provided centrally by the application.

e. General Methodology:

Methodology Consideration: This project will be performed following the OSWER's System Life Cycle Management Guidance (Directive No. 9028.00, July 29, 1988). In addition, OSW has in place formal Change Control Procedures in conformance with the life cycle guidance. As appropriate, these procedures are further discussed in Section 6, **Statement of Work Requirements.**

Identification of Systems Development Life-Cycle Stage: All life-cycle stages.

f. All terms of the MOSES contract are in force for the work to be performed under this task order. This Task Order Statement of Work falls into the scope of the Contract Statement of Work (Section C.2) related to (a) Section 3.1 Systems Development Life Cycle Services (b) Section 3.2 Project Management of the Contract; and Management and Operation of the Systems Development Life Cycle Environment and (c) Section 3.3 Specialized and Ad Hoc Services. Specifically, all subsections of Sections 3.1 and 3.2 apply. The following subsections of Section 3.3 apply:

- Subsection 3.3.2, Independent Verification and Validation Support
- Subsection 3.3.5, Data Management Services
- Subsection 3.3.6, Briefings
- Subsection 3.3.7, Task Order Close Out

g. Where work is to be performed: Systems Development Center, 6565 Arlington Blvd., Falls Church, Virginia 22042-3000.

5. **Purpose and Scope:**

This task order will provide contractor support for the development and operations and maintenance of all life cycle aspects of information management systems related to the information requirements of RCRA. This includes requirements' definition, design, development, programming, testing, implementation maintenance, documentation, training, and outreach and user support.

These activities may be conducted using productivity enhancement methods and tools such as computer-aided systems engineering and the products may be designed and constructed on a range of platforms including Internet/Intranet-based applications and access capabilities.

The EPA project team will provide the appropriate materials and documents as well as identify the necessary persons who are acknowledged authorities of related systems (such as FINDS) in order to conduct this project.

6. **Statement of Work Requirements:**

TASK 1 - PROJECT PLAN DEVELOPMENT

SUBTASK 1.1 - INITIAL PROJECT PLAN DEVELOPMENT

DESCRIPTION:

Upon issuance of this Task Order, the contractor shall develop a Project Plan, including technical approach, estimated resources, staffing, deliverables, schedule, and cost estimate addressing requirements of the Statement of Work (SOW).

Until issuance of a modification to this Task Order stating the Government's acceptance of the Project Plan, and establishing the ceiling price for the work ordered, the contractor shall not proceed with any other work contained in the SOW.

Contractor development of the Project Plan shall be performed in accordance with the procedures established for the Software Engineering Process (SEP) Section 3.2 of the contract SOW, and with procedures established in the current Task Order providing for the general technical management and administration of the Systems Development Center (SDC).

DELIVERABLES

Project Plan

ACCEPTANCE CRITERIA

Reference Section 9

SUBTASK 1.2 - MAINTAIN THE PROJECT PLAN

DESCRIPTION:

The contractor shall update the project plan when requested by the CO. The project plan may be modified to accommodate new requirements that arise during the term of the project. These requirements must fit within the scope of the Task Order and the period of performance. Minor deviations from the specifics of the Project Plan that have been mutually agreed upon by the TOPO and Technical Project Leader will be documented in the Change Control Board (CCB) minutes in lieu of Project Plan modifications.

DELIVERABLES

Updated Project Plan

ACCEPTANCE CRITERIA

Reference Section 9

SUBTASK 1.3 REVISE PROJECT PLAN

DESCRIPTION:

In the event that the TOPO determines that the SOW for the Task Order requires modification to: (1) add or delete a task or deliverable; (2) change the period of performance when crossing fiscal years; or (3) increase or decrease the available resources to support the effort, the revised SOW will be provided to the contractor by the Contracting Officer, so that the approved Project Plan can be modified to reflect the revised SOW. As with Subtask 1.1, contractor revision of the Project Plan shall proceed in accordance with all approved SEP and SDC procedures.

DELIVERABLES

Revised Project Plan

ACCEPTANCE CRITERIA

Reference Section 9

TASK 2 - PROJECT MANAGEMENT

SUBTASK 2.1 - MANAGE THE Task Order

DESCRIPTION:

The contractor shall manage the Task Order Project Team, and modify the approved Project Plan to reflect minor changes that do not require Contracting Officer approval.

DELIVERABLES

Product Assurance Plan
Documentation of CCB Minutes
Monthly Technical and Financial Reports

ACCEPTANCE CRITERIA

Reference Section 9

SUBTASK 2.2 - CLOSE-OUT OF THE Task Order

DESCRIPTION:

The contractor shall provide for the close-out of the Task Order at the end of the period of performance.

SUBTASK 2.3 - TRANSITION

DESCRIPTION:

2.3 The work performed under this Task Order is vital to the Government and must be continued without interruption. Upon contract expiration a successor, either the Government or another contractor, may continue this work. The contractor will provide a transition plan for the transition of work to the EPA or another contractor. The transition plan which contains four major sections, shall provide for a cooperative effort (between the EPA and follow-on contractor), and shall include at a minimum an inventory of documentation to be turned over to the EPA, schedule of turnover, a description of parallel operation and recognition of security issues that includes an updated list of

contractors to be removed from all RACF groups, profiles, etc. (if applicable). Training support for the successor is anticipated, and will be coordinated in advance by the TOPO. The contractor shall provide sufficient experienced personnel during the transition period to ensure that the services called for by this contract are maintained at the required level of proficiency.

The contractor shall prepare a transition plan upon written request of the TOPO. The TOPO will review the plan and if the plan is acceptable, forward it to the Contracting Officer for approval. The contractor shall not prepare a cost estimate or any portion of the transition plan (including PA) until notification is received from the Contracting Officer.

2.3.1 Documentation Task Order Inventory

The contractor shall conduct physical inventory of the project and team libraries for systems documents, life cycle documents, and other documentation (e.g., COBOL manuals, third party software). Reconcile inventoried documentation with that listed in the SOW (if applicable). Review the status of all products. Update the PA Deliverables Accountability Report. Arrange for the return of needed documentation and disposal of all unwanted documentation. Ascertain the format documentation will be delivered in (e.g., hardcopy, softcopy, Lotus Notes, WordPerfect (the latest standard version).

General: The contractor shall create an acceptance criteria checklist that will be used to track the successful completion of the transition of work to a successor. Establish with TOPO the timing and schedule transfer (i.e., phase out or bulk transfer).

2.3.2 Transition of Security

The contractor shall conduct the following activities in the Transition Plan:

Produce a Security Transition Plan. Provide a list of mainframe and/or UNIX accounts associated with the Task Order. Provide the names of the contractor employees with access to the aforementioned mainframe and/or UNIX accounts. Provide the names of all contractor employees with access to Lotus Notes or GroupWise system(s). Document any additional security procedures needed for or involved in applications (e.g., library accesses, tables). Ascertain which contractor staffs have EPA Headquarters badges that must be returned. Discuss security issues with EPA SDC Information Security Officer. Determine if debriefings on

the Privacy Act information are appropriate for the Task Order.

2.3.3 Training EPA and Designated Contractor

A major factor in the successful transition of the Task Order to EPA and/or the designated contractor is training. To facilitate training, the contractor shall develop a Transition Plan which shall include (at a minimum) a Training Plan identifying specific training sessions, objectives, and curriculum. Each session should delineate what training will occur, and appropriate documentation provided.

2.3.4 Management and Scheduling

The contractor shall review transition plan activities and schedules based on the time available to conduct the transition. Review schedules to ensure that they reflect the transition dates reflected in the SOW (if applicable); and monitor priorities and schedules relative to the Transition Plan to identify potential conflicts. Notify the TOPO when conflicts are identified.

DELIVERABLES:

Transition Plan:	Documentation, Security, Training and Management. Document Inventory and Disposal Training Materials Security Plan Schedule of Transition Activities Transition Results Report

ACCEPTANCE CRITERIA

Reference Section 9

TASK 3 - SOFTWARE AND MAINTENANCE

SUBTASK 3.1 - RCRIS

DESCRIPTION:

3.1 The contractor shall maintain Implementer, Merge and National Oversight software for RCRIS on the EPA National Computer Center (NCC) Mainframe. RCRIS Implementer, Merge and National Oversight software shall be maintained on the EPA Mainframe located in Research Triangle Park (RTP), North Carolina

or other platforms as directed by the EPA under this task order.

- The contractor shall adhere to established RCRIS configuration management policies and procedures including use of problem management tracking tools. RCRIS User Support shall enter all requests for changes/enhancements into the designated problem tracking system. All requests for modifications to the software shall be assigned a tracking number using the approved EPA mainframe tracking system, REMEDY. The issues shall be verified by RCRIS User Support, and reviewed and approved according to the RCRIS change management process for assignment to the appropriate change/enhancement category.

- The contractor shall maintain Implementer, Merge, and National Oversight software as the result of the following:

  - Problems reported by User community

    The User community will report problems by calling the 800 hotline supported by the contractor (see Task 5). All software problems or bugs shall be reviewed and approved for release by the TOPO.

  - Production problems

    The contractor shall analyze and correct problems that arise in the production environments to determine why they occur and how they may be resolved. These problems may arise as the result of new versions of the operating system software or data base management system software (FOCUS or Mainframe operating system changes) and independent testing, for example. The contractor shall also keep abreast of new versions of software which support the RCRA systems in order to anticipate and address problems before they occur. That way, anticipated modifications to RCRIS software to reflect changes in operating system or database software can be planned for scheduled releases instead of being a surprise

which mandates an "emergency" release.

- New regulatory or user requirements

  The contractor shall be responsible for implementing changes to RCRIS Implementer, Merge, and National Oversight software as the result of new regulatory requirements, Agency requirements or requests for functional improvements made by users, usually as part of an approved release. New regulatory or user requests and other changes that are logged into the problem tracking system for enhancements which effect RCRIS functionality shall only be implemented after formal approval by the EPA.

o The contractor shall provide backup support for updates to the national oversight database, as determined by the TOPO. The contractor shall also support database administration tasks when necessary and as related to the technical and operational consistency of the national oversight database.

o The contractor shall prepare for emergency software releases as required and requested by the TOPO in writing.

SUBTASK 3.2 - BRS

DESCRIPTION:

3.2 The contractor shall maintain BRS implementer software on the IBM PC and Mainframe and National Oversight Software on the IBM Mainframe.

o The contractor shall adhere to established BRS configuration management policies and procedures including use of problem management tracking tools. BRS User Support shall enter all requests for changes/enhancements into the designated problem tracking system. All requests for modifications to the software shall be assigned a tracking number using the approved EPA mainframe tracking system, REMEDY. The

issues shall be verified by BRS User Support, and reviewed and approved according to the BRS change management process for assignment to the appropriate change/enhancement category.

- The BRS software shall be maintained as required. The contractor shall be responsible for analyzing and correcting problems that arise in the production environments to determine why they occur and how they may be resolved. These problems may arise as the result of new versions of the operating system software or data base management system software (FOCUS or Mainframe operating system changes) and independent testing, for example. It shall be replaced by software for each subsequent biennial reporting cycle. For problems with the software that are reported by the user community through the problem management system, the contractor shall make necessary revisions and distribute interim releases on an as necessary basis in order to keep the system operational.

- For BRS software releases, the contractor shall:

  - Prepare technical specifications from functional requirements specifications provided by the TOPO in writing. Final technical specifications shall be approved by the TOPO in writing.

  - Prepare detailed Installation Instructions for PC platform for both regional and state database administrators.

  - Prepare List of Software Changes (summary of features) which provides a summary of each item included in the release.

  - Make quality controlled copies of PC software and documentation for each release. The TOPO shall provide the required quantities of software and documentation for each release. The TOPO, in writing, shall provide the current mailing list for distribution prior to issuance of the release.

The contractor shall develop and implement BRS National Oversight and Database software for the EPA's Mainframe environment for each biennial reporting cycle. The contractor shall:

- Prepare technical specifications from functional specifications provided by the TOPO in writing. Final technical specifications shall be approved by the TOPO in writing.

- Develop Draft National Oversight software and database based on guidance provided by the TOPO in writing.

- Produce revised software and database in accordance with EPA review of Draft software.

- Produce final National Oversight software and database approved by the TOPO in writing.

- Assist the EPA, if directed by the TOPO in writing, in loading the biennial report data via the National Oversight software into the National Oversight data base.

- Conduct performance checks on the data to ensure that all data are transferred from the implementer to the oversight database.

The contractor shall make revisions to the BRS Implementer/Oversight Software to reflect any changes in the biennial reporting cycle forms as directed by the TOPO in writing. The Biennial Report forms shall be supplied to the contractor by the TOPO in writing. The existing BRS Software shall serve as the baseline for the new reporting cycle. Modifications needed are likely to be caused by such things as:

- Revisions to BRS forms resulting from regulatory changes.

- Features and improvements requested by users during the previous reporting cycle.

- Improved cross-system comparison reporting of biennial

reporting data from each cycle.

DELIVERABLES:

3.1 The contractor shall deliver the following for each RCRIS software release listed below:

- RCRIS Maintenance Release Software.
  Includes:
    - RCRIS Mainframe Implementer and Mainframe National Oversight Data Base Administrator software.
    - Software Installation Instructions.
    - List of Software Changes (Summary of Features).

3.2 The contractor shall deliver the following for each BRS software release listed below:

- BRS Maintenance Release Software.
    - Support up to one BRS maintenance release.

ACCEPTANCE CRITERIA:

The contractor shall review and complete all RCRIS and BRS requests as specified above and shall adhere to all OSWER Life Cycle Management Guidance.

TASK 4 - TESTING (SOFTWARE AND DOCUMENTATION)

DESCRIPTION:

The contractor shall perform full production testing for RCRIS and BRS and related Systems to include unit and integrated testing on all software and documentation developed/produced under this task order before delivering the software and documentation to the EPA. To accomplish this task, the contractor shall:

o Maintain reusable and adaptable test databases and test procedures to support unit, integration and acceptance testing of both software and documentation in each

software release.

- o Conduct complete system unit testing,
- o Conduct complete system integrated testing,
- o Conduct complete system acceptance testing,
- o Conduct complete documentation testing for each release of the software, and
- o Develop software and documentation modifications required to correct deficiencies/problems identified during the various testing phases. The modifications must be compared for consistency to the functional requirements being tested.

The contractor shall devise a standard and reusable "test" for RCRIS and BRS to ensure that changes do not adversely affect end user functionality. The contractor shall maintain reusable and adaptable test databases and test procedures to support unit, integration and acceptance testing of both software and documentation in each software release.

All aspects of RCRIS and BRS and related Systems shall be thoroughly tested (i.e., all modules, conversion, merged databases, installation, parallel operations, extract programs, etc.) in a separate non-production test environment. At both a unit and integrated level, the contractor shall develop a standard testing procedure which identifies data relationships.

As part of the system acceptance testing for all major releases, all system modifications and all major system modules shall be tested thoroughly using established test procedures and test data. Test data shall test the range of software functions, and shall include both valid and invalid data.

For RCRIS, the testing shall include at a minimum:

- data entry ((Simultaneous User (SU) and non-SU))
- State cycle processing (both extracts and merge, including translator pre-load, data assessment and load)
- Universe calculations

- Oversight data loads and all DBA functions.

For BRS, the testing shall include at a minimum:
- Data entry (SU and non-SU)
- Basic and Advanced Editor
- Data Extracts (edited and unedited)
- Data Loads (electronic reporter and data transfer)
- Waste file conversion
- All oversight DBA functions

For BRS, this must be tested for both PC and mainframe implementer software and oversight mainframe software.

The contractor shall test documentation against Systems where applicable to ensure that documentation accurately reflects the software functions contained within a release. The contractor shall identify all discrepancies between software and documentation in a draft and final report to the TOPO. An acceptance test report shall be submitted to the TOPO 30 days after each scheduled release. For an interim/maintenance or emergency release, an SDC PA Acceptance Test Certification statement shall be submitted to the TOPO prior to the release.

For both RCRIS and BRS, any software and documentation changes must include testing to ensure that the software and documentation remain Y2K compliant and that the test reports must indicate said compliance.

DELIVERABLES:

Draft and final software discrepancy report
Draft and final documentation discrepancy report
Final software certification/release report in the standard SDC PA format
Final documentation certification/release report in the standard SDC PA format

The above deliverables shall identify detailed testing procedures (specifying what was to be tested, how it was to be tested, and what results are expected) and testing results (specifying what results were obtained and any discrepancies between expectations and results). Testing procedures shall include specifics on which files or

databases were expected for testing.

Note: All deliverables must coincide with software release schedules as described in Task 3

ACCEPTANCE CRITERIA:

The contractor shall ensure that the software and documentation are tested and proven to satisfy the detailed RCRIS and BRS functional requirements as specified by the TOPO in writing, and each discrepancy is documented in a production Test Incident Report (TIR).

TASK 5 - USER SUPPORT

DESCRIPTION:

The contractor shall provide combined RCRIS and BRS and related system User Support services, as required, to the entire user community. This community is defined to include the implementer level users at EPA Regional offices and State agencies, as well as EPA system oversight user at Headquarters. The support includes: the tracking of and the providing of factual answers or responses to System operational questions and to requests for System documentation; and the tracking of operations and maintenance issues (e.g., bugs), streamlining proposals and issues requiring changes to the RCRA Program or Program Guidance reported by the user community. Calls of an interpretative nature or having System impact such as a request for a System change must be handled in accordance with the RCRIS/BRS Change Management Process. Calls addressing RCRIS and BRS system security including those requiring RACF security administration responses shall be handled in the change management tracking system and as described in Task 8. The contractor shall update and maintain the User Support Procedures Manual.

The contractor shall answer the phone as follows - "John/Mary Jones of the RCRIS/BRS User Support, the contractor staff." Requests for assistance shall be directed to the contractor who shall maintain a toll-free hotline from 8:00 a.m. to 6:00 p.m. (Eastern Standard or Daylight Time, as appropriate), Monday through Friday (except federal holidays). During non-business hours and federal holidays, incoming calls shall be

received by an answering machine/service. The answering machine message shall indicate that the call is being received by the contractor staff of the RCRIS and BRS user support staff. The message shall indicate what are the normal business hours and that a response to the call will be made during business hours.

The contractor shall also be responsible for reviewing both the answering machine/service calls and all RCRIS/BRS User Support electronic communications daily by 8:30 a.m. for receipt of user requests. Upon receipt, all requests, shall be entered in the change management tracking system for analysis and/or immediate resolution. Support staff shall attempt to duplicate reported problems immediately upon receipt. Emergency problems shall be responded to with a call back to the user as soon as possible, and if possible, within two hours. All other calls, including requests for documentation, shall be responded to with a call back to the user within 24 hours. Other requests shall be addressed in order of receipt and assigned to a change management system class for resolution. Support staff shall have primary responsibility for maintaining and updating the change management tracking system, and contacting users with an update and resolution status of all reported issues.

Periodic special reports from RCRIS, BRS and RCRAInfo may be required. These may be new reports or standard reports. The report requests will be submitted to the contractor by the TOPO. The contractor shall assume that approximately 10 to 20 reports per month will be requested.

As part of the change control process, the contractor shall provide the EPA with the following support:

- maintain the change management tracking system records for recording system problems and user requests in the EPA approved mainframe tracking system (Remedy);

- biweekly user support status reports which include information on outstanding issues and statistical and trends information. The contractor shall receive the requirements for the reports from the TOPO in writing;

Additionally, the contractor shall provide RCRIS/BRS materials, including documentation and software diskettes, for distribution to the user community. PC software release

diskettes and any necessary documentation shall be copied and mailed by the user support staff.

The contractor shall assign a User Support staff manager responsible for overall support activities and for regular attendance at the RCRIS and BRS biweekly Configuration Control Board (CCB) meetings. The user support staff manager shall also provide for initial and ongoing staff training, as needed, in at least four basic areas:

1) RCRA Orientation;
2) RCRIS/BRS database/software;
3) RCRIS/BRS Change Management Process; and
4) RCRIS/BRS Change Management Tracking System (Remedy).

DELIVERABLES:

- Biweekly RCRIS/BRS change management tracking system statistics reports (as defined by TOPO in writing) at CCB Meetings, or as requested by TOPO in writing.

- Copies of detailed RCRIS/BRS change management tracking system issues, as requested by TOPO in writing.

- Software diskettes for users, as requested by TOPO in writing.

- Electronic versions (currently WordPerfect) of all RCRIS/BRS documentation for users, as requested by TOPO in writing.

- Other RCRIS/BRS materials developed by the contractor, or supplied by the EPA for users, as requested by TOPO in writing.

- Periodic special database reports. The TOPO will obtain the reports by submitting a written request. The requests may range from 10 to 20 per month.

ACCEPTANCE CRITERIA:

The contractor shall maintain the RCRIS/BRS change management process and tracking system consistent with OSWER System Life Cycle Guidance cited in Section 4e. The change management tracking system statistics reports and issues shall

accurately describe requested changes with only minor clarification required on less than ten (10) percent of all change requests. All materials requested by user shall be supplied electronically or mailed withing 24 business hours of the user request. All special database reports shall be supplied to the TOPO with five (5) business days of the TOPO request. All issues requiring EPA review must be forwarded to the TOPO no later than the next scheduled CCB meeting.

TASK 6 - DOCUMENTATION

DESCRIPTION:

The contractor shall ensure that all RCRIS/BRS documentation meets OSWER System Life Cycle Guidance. All documents shall be delivered in draft format for review purposes prior to final submission. The contractor shall prepare documentation in two-sided format.

The contractor shall develop and/or maintain for all Task 3 changes, at the written direction of the TOPO, the documents listed below:

RCRIS
- Merged Data Base Administration Guide
- User Guide
- Database Structure Charts (implementer and oversight)
- Reports Library
- Pre-release Flat File Specifications for Translators
- Translator Guide
- Data Element Dictionary
- Quick Reference Guide for RCRIS Codes
- National Oversight User Guide/National Oversight Guide
- Fact Sheets
- NTIS Documentation
- Field Test Guide

BRS
- User Guide
- Database Structure Charts (implementer and oversight)
- Reports Library
- Translator Guide
- Data Element Dictionary
- Electronic Reporting Guide

- Reporting Data Base User Guide
- NTIS Documentation

The contractor shall develop and maintain other documents, at the request of the TOPO, in writing.

DELIVERABLES:

The contractor shall deliver documents in draft format for review. The contractor shall deliver final documents to the TOPO in a minimum of one (1) camera-ready copy and one (1) copy. The contractor, at the written request of the TOPO, shall provide a complete document replacement or change pages. The contractor shall also deliver to the TOPO all final documentation in the following electronic formats: (1) the version of WordPerfect that is consistent with current EPA standards and (2) Internet ready format (currently Adobe Acrobat PDF file format). The electronic version shall include both of the following: an electronic version of change pages (if applicable); and a complete electronic version of all documents with all change pages incorporated into the individual documents.

- The contractor shall develop and/or maintain all RCRIS and BRS documentation listed above in Task 6.

- The contractor shall test all documentation as it relates to current and new software versions

- The Deliverable schedule must coincide with Task 3 Software release schedules

The documentation described above in this Task and the other Tasks of this Order shall be provided in "Internet Ready" format for posting on the Internet by the Agency. Specifically, the document(s) would be required to be delivered in Portable Document Format (PDF), HTML and/or ASCII. Documents that contain graphs, charts, table, photographs or any other elements that cannot be represented in ASCII shall be provided in PDF or HTML. This determination shall be made by the TOPO and is dependant on the nature of the document. The files shall be edited and proofed to ensure successful conversion of the documents. The TOPO shall notify the contractor in advance if a determination is made to use PDF, HTML or another format.

For each software release included with Task 3, camera-ready documentation and all necessary hard and electronic copies shall be furnished with the release. Internet ready files shall be delivered on or before the software release date.

ACCEPTANCE CRITERIA:

The TOPO shall establish the acceptance criteria in accordance with the RCRIS and BRS documentation requirements and in conformance with OSWER System Life Cycle Guidance.

TASK 7 - Model Review and Encyclopedia Management

The contractor shall provide expertise in the Information Engineering Methodology (IEM) for independent model review of the Waste Information Needs (WIN) and RCRAInfo Program Area Analyses (PAA's) models. The contractor shall assume that a minimum of 2 and a maximum of 3 models will be reviewed and provided to the contractor by January 1, 2001. The contractor shall manage the IEM encyclopedia for support of the WIN and RCRAInfo work.

The Contractor, shall attend meetings with the EPA Task Order Project Officer, as determined by the TOPO to complete this task.

The contractor shall present and discuss the results of the entire review with the EPA TOPO.

SUBTASK 7.1 Quality Assurance Review

The contractor shall review the WIN and RCRAInfo models and each PAA model report for completeness as the Information Engineering methodology requires for the next phase of design and development.

The contractor shall address the following questions in their review of the models and reports:

Have all the processes, entity types, attributes and relationships been found?

Does the model include processes to create, delete, update and reference each entity type, attribute and relationship?

SUBTASK 7.2 Consistency Review

The contractor shall check for consistency throughout the new (PAA) model, to evaluate and map the PAA model to the current system to be sure the model captures the required data needs of the business:

- The contractor shall compare the new business model against the current system by employing the like object comparison
- Do the business activities (elementary process) involved the use of every entity type, relationships and attributes.
- Determine whether the new model contains a process for the following purposes: create, read, update or delete each entity type associate and disassociate each relationship, create values for attributes.

The contractor shall perform correctness checking to confirm that the business area model accurately represents the program area and conforms to the rules and conventions of Information Engineering.

- Have attributes been grouped with correct entity types? Does the model exclude all unnecessary elements? Are the information views consistent across processes?
- Check for redundancy, e.g., unnecessary attributes and relationships, overlapping of entity types and duplicated processes.
- Check the consistency of quantitative information gathered about objects in the model such as subtype volume and relationship cardinality.
- Do a structured walkthrough on the model objects and ask questions or have the PAA team explain the model's meaning, interpretations and model decisions.

SUBTASK 7.3 Reports

The contractor shall document the results, recommendations,

observations and concerns based on the review and walkthrough.

The contractor shall present and discuss results of the entire review. If the recommendations require substantial changes, the contractor may be required to do another review of the model.

SUBTASK 7.4 Encyclopedia Management

The contractor shall management the WIN/RCRAInfo IEM encyclopedia for the development work associated with WIN/Info. The TOPO will provide access to the appropriate NTSD servers and databases for the encyclopedia management. The contractor

DELIVERABLES:

DELIVERABLE 1: After the review of the model objects and reports, conduct a structured walkthrough with the PAA team by April 30, 2001.

DELIVERABLE 2: Document the results of the model reviews, recommendations, observations and concerns due by May 31, 2001.

DELIVERABLE 3: A presentation and discussion of the entire review (draft report) due by June 30, 2001.

DELIVERABLE 4: If the recommendation requires substantial model changes, another review of the UID and WAM models and reports may be required along with documenting and presenting the results of the final review.

DELIVERABLE 5: A final report on the review of the UID and WAM models and reports due July 31, 2001.

DELIVERABLE 6: Assist TOPO in developing materials required to prepare a Briefing paper to the WIN Executive Steering Committee on the status of the models. The format and content of the Briefing material will be identified by TOPO.

DELIVERABLE 7: Develop a procedure for encyclopedia management by November 1, 2000. Manage the IEM encyclopedia for the WIN/RCRAInfo project

on an ongoing basis.

ACCEPTANCE CRITERIA:

The contractor shall complete the quality assurance and consistency reviews in a complete, accurate and timely manner. The draft and final reports and briefing material shall be completed with no delays.

TASK 8 - CHANGE CONTROL

DESCRIPTION:

The contractor shall define and execute a process for ensuring that software and documentation changes are controlled and all platforms are consistent. The contractor shall ensure that all documentation reflects software changes. The contractor shall provide technical support for librarian tracking procedures, including any necessary training materials and/or demonstrations, and documentation. The contractor shall provide the Task Order Project Officer with reports which track all authorized system changes from beginning to implementation. With each software release, the contractor shall provide to the TOPO, a complete Release package which shall include:

- Summary of software and documentation changes
- Documentation and software alerts
- Tracking Librarian activity report

Documentation shall also be provided on diskettes electronically in WordPerfect and in "Internet Ready" format (current EPA versions).

DELIVERABLES:

Software release files containing all software and documentation changes

Deliverable schedules shall coincide with the Task 3 Software release schedule

ACCEPTANCE CRITERIA:

The change control process shall be consistent with SEI

Level 3 best practices.

7. Reporting Requirements:

In addition to the Contract Standard Task Order Reports, Monthly written status reports by System (RCRIS and BRS) and functional area outlining tasks completed, deliverable status and percentage of a milestone met are required. For each task, the contractor shall report work progress, problems which might cause delays in meeting deliverable dates, proposed solutions for addressing problems to ensure that the deliverable dates can be achieved and plans for work activities for the upcoming two weeks. A monthly meeting to review all reports shall be scheduled with the Task Order Project Officer.

The contractor shall provide the Task Order Project Officer with an itemized list of ODC's. With regard to monthly invoices and labor hours, the contractor shall indicate the actual period in which work was performed. In addition, for ODC's copies of all receipts for equipment rental, travel, reproduction, etc., shall be included with monthly financial reports so that the TOPO may verify charges. Financial reporting shall be reported for two categories, RCRIS and BRS.

8. Other Requirements:

a. Guidelines/Standards - From time to time the additional following guidelines may be provided:

1. EPA ADP System Design and Development Guidance, 4 volumes and 2 supplements.
2. OSWER System Life Cycle Guidance.
3. IEM™ Handbooks.
4. EPA Common User Interface Standards (Draft).
5. EPA Information Technology Architecture Roadmap.
6. GIS Workstation Implementation Guidelines (August 1991) (Draft).
7. EPA IRM Policy Manual.
8. NDPD Policy Manual.
9. ADABAS Policies, Procedures and Standards.
10. EPA Hardware and Software Standards.
11. Revised OMB Circular A-130, Appendix III
12. EPA Information Security Manual
13. NIST User Guide for Developing and Evaluating Security

Plans for unclassified Federal Automated Information Systems (DRAFT).

14. EPA SDC Systems Engineering Environment

b. Distribution and Deliverables Requirement: Please refer to Deliverables listed under appropriate Tasks.

c. Security and Access(s): Security requirements from this project will be determined by the EPA TOPO. Reference Sections H.14 regarding the Treatment of Confidential Business Information (EPAAR 1552.235.71) (April 1984). H15 regarding Treatment of Confidential Business Information (TSCA) (EPAAR 1552.235-76) (APR 1996). H16 Data Security for Federal Insecticide, Fungicide, and Rodenticide Act Confidential Business Information (EPAAR 1552.235-77) (APR 1996). If confidential information is accessed, the contractor will protect from unauthorized disclosure all confidential information handled in the performance of this project in accordance with (1) EPA policy and procedures relating to confidential information, (2) the EPA security plan for this project, and (3) the SDC security plan as it relates to the handling of confidential information.

EPA defines all Agency information as sensitive. Even if the TOPO decides that no confidential information will be assessed on this project, the contractor must ensure that all Agency information in safeguarded during the performance of this project in accordance with (1) EPA information security policy and procedures, (2) the security plan for this project, and (3) the SDC security plan as it relates to protecting EPA information resources.

Electronic Data Interchange (EDI) files and data may be read by contractor support staff with EPA controlling, monitoring and limiting update and alter access. Also, an IBM package, Resource Access Control Facility (RACF), is used to protect any mainframe files associated with this project. The contract shall request mainframe, and/or UNIX access from the TOPO as required. The contractor shall notify the TOPO of any employee who has left the project. This notification is necessary so that the TOPO can cancel the employees access to all data sets related to this project. Failure to do so may be regarded as a breach of (insert project name) security if the TOPO is not notified by the last day of employee's service.

CBI clearances may be required to access FIFRA data.

9.

ACCEPTANCE CRITERIA

REQUIRED SERVICE	STANDARDS
Task 1 Subtask 1.1Project Plan	1. Meets requirements 2. Estimate ceiling accepted 3. Meets Clause G.1
Task 1 Subtask 1.2 Updated Plan	1. Meets requirements 2. Estimated ceiling accepted 3. Meets Clause G.1
Task 1 Subtask 1.3 Revised Plan	1. Meet requirements 2. Estimated ceiling accepted 3. Meets Clause G.1

Task 2 Subtask 2.1 Manage TO Product Assurance	1. Address each deliverable 2. Clearly states review steps 3. Provides adequate review time 4. Deliverables (documentation, releases, deployment etc.) meet specifications, systems are fully tested for operation, quality of output is consistent, software is free of significant software malfunctions)

Task 2 Subtask 2.1 Documentation of CCB	Accepted if they correctly and completely describe the activities recorded in the CCB meetings
Task 2 Subtask 2.1 Monthly Technical and Financial Reports	Accepted if they meet the contract requirements
Task 2 Subtask 2.2 Close-Out;	Timely and accurate list of deliverables and of EPA property
Task 2 Subtasks: 2.3 Transition Documentation, Security, Training and Management. Document Inventory and Disposal; Training Materials; Security Plan, Schedule of Transition Activities, Transition Results Report	Accurate inventory, thorough, clear, well-organized effective transition to EPA or another contractor, successful transition of work to the succeeding contractor

ATOPO - Alternate Task Order Project Officer
ADP - Automated Data Processing
ASCII - Computer Data Standards
BRS - Biennial Reporting System
CCB - Change Control Board
CMB - Configuration Management Board
CO - Contracting Officer
DBA - Data Base Administrator
DMMG - Development and Maintenance Methodology Group
EMAIL - EPA Electronic Mail
TOPO - Task Order Project Officer
EDI - Electronic Data Interchange
EPA - Environmental Protection Agency
ETSD - Enterprise Technology Service Division
FINDS - Facility Index Data System
FOCUS - EPA approved application software
FOIA - Freedom of Information Act
HTML - Hyper Text Markup Language
LAN - Local Area Network
MOSES - Mission Oriented Systems Engineering System
NCC - National Computer Center
NO - National Oversight
NTIS - National Technical Information Service
ODC - Other Direct Costs
OSW - Office of Solid Waste
OSWER - Office of Solid Waste and Emergency Response
PAA - Program Area Analysis
PC - Personal Computer
PDF - Portable Data Files
PO - Project Officer
RACF - Resource Access Control Facility
RCRA - Resource Conservation and Recovery Act
RCRIS - Resource Conservation Recovery Information System
RCS - Request for Contractor Services
RTP - Research Triangle Park
SDC - Systems Development Center
SOW - Statement of Work
SU - Simultaneous User
TIR - Test Incident Report
TOPO - Task Order Project Officer
UID - Universe Identification
WAM - Waste Activity Monitoring
WIN - Waste Information Needs

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List of Changes

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1 and 2	Changes to Title and Period of Performance	3
4d	New paragraph on RCRAInfo	5
Task 5	Special Reports from Databases	20
Task 7	Added new Sub-Task on "Encyclopedia Management"	23-26
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